Draft 2

Advancements in the Marine Dimension of Arctic Spatial Data Infrastructure

A Strategic Plan for the Arctic Regional Hydrographic Commission 2014-2018

Introduction

The Arctic is undergoing significant transformation as a result of climate change and increased human use including marine transportation, tourism, and resource development. To enhance the hydrographic services needed to support these activities, the Arctic Ocean Coastal States; being Canada, Denmark, Norway, the Russian Federation and the United States, established the Arctic Regional Hydrographic Commission (ARHC) in 2010. The ARHC is the 15th Regional Hydrographic Commission constituted under the auspices of the International Hydrographic Organization (IHO) who together with the IHO Hydrographic Commission on Antarctica, form a seamless network of 'Commissions' to oversee, harmonize and optimize hydrographic services on a regional basis adhering to IHO standards.

This Strategic Plan aims to provide guidelines for the ARHC and optimize opportunities for collective or coordinated hydrographic investments and efforts in the Arctic.

ARHC Vision:

Be the principal hydrographic authority in the Arctic by ensuring and promoting maritime safety while supporting the protection and sustainable use of the marine environment. alternative:

Improved Marine Spatial Data Infrastructure (MSDI) in the Arctic

ARHC Mission:

The ARHC is a technical, consultative and collaborative body through which its Members can exchange knowledge and experience related to Arctic hydrography and to collaboratively seek and share innovative solutions into the ways and means of achieving ARHC objectives.

Strategic Considerations

Noting that less than 10% of the Arctic are surveyed and charted to modern standards

Noting the increased traffic and resource exploitation

Considering the remote and challenging environment with limited search and rescue capabilities

Implying the need of ARHC involvement in achieving the appropriate and adequate provision of hydrographic products and services in Arctic waters to improve the safety of navigation and the protection of life at sea and the marine environment.

Alternative: **Implying** the need of ARHC involvement in improving the Marine Spatial Data Infrastructure

ARHC Objectives, Strategic Outcomes and Ways & Means

Objective 1:

Promote technical cooperation among Member States and seek cooperation with other partners in order to improve efficiency and enhance hydrographic data collection

Five-Year Outcome:

An effective Commission committed to exchange experiences related to use of new technology. Potential partners for speeding up the surveying are identified and addressed. Standards and priorities for surveying are developed and communicated to cooperating agencies.

Ways and Means:

ARHC will use all possible means and fora to strengthen relationships and enhance the exchange of hydrographic science and information amongst its Member States and to coordinate with other Hydrographic Offices interested to contribute to improved hydrography in the Arctic. The Operations and Technologies Working Group (OTWG) will be instrumental.

An overview of status of surveying and charting is maintained by annual National Reports and by the outcome of the Arctic International Charting Coordination Working Group (AICCWG)

The ARHC will coordinate and/or collaborate with all interested parties for data collection in Arctic waters to achieve the optimal impact of 3rd party data collection.

Objective 2:

Provide a venue for Member States to collaborate in the development of new products and services in order to meet current and anticipated user needs

Five-Year Outcome:

Through its inventory of coverage, gaps and opportunities the ARHC has developed a product catalogue to support improved Arctic MSDI.

Ways and Means:

The need for products and services will be identified in dialogue with different user groups. The Science Forum will be a venue for identifying user needs and priorities.

Objective 3:

Seek and/or strengthen cooperation with international and intergovernmental organizations, industry and communities in order to support safety at sea and protect the environment.

Five Year Outcome:

Stronger communication and planning between ARHC and other key organizations (i.e, IMO, IALA, IBCAO, EU Arctic Council, environmental organizations...) is established. Ongoing and planned industry activity is identified and adequate contacts established.

Ways and Means:

Member States and the ARHC in general will actively seek collaborations at the international and national levels and share experiences and needs. Relevant organizations will regularly be invited to ARHC meetings. The Science Forum to be used as a venue for industry, scientific organizations and communities.

Objective 4:

Raise awareness of the importance, value and needs of hydrography in the Arctic region

Five Year Outcome:

The ARHC has established a common understanding and a complimentary approach to the communication of the importance of hydrography in the Arctic and the risks associated with the use of legacy information and products in modern navigational systems.

Ways and Means:

To the greatest extent possible ARHC Members will strive to ensure consistency in its communication of the importance of Arctic hydrography and to communicate risks from gaps or limitations of data and products such as legacy data in a consistent or complementary manner. Additionally, the ARHC will communicate its progress through national reporting by individual Members within its national forum and by the collective ARHC through the International Hydrographic Organization at the international level.